

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/803,330	03/17/2004	Ralf Kamphausen	9208.0012	5588	
22852	22852 7590 08/24/2006			EXAMINER	
FINNEGAN LLP	, HENDERSON, FAR	SCHNEIDER, JOSHUA D			
901 NEW YORK AVENUE, NW			ART UNIT	PAPER NUMBER	
WASHINGTON, DC 20001-4413			2182		
			DATE MAILED: 08/24/2000	6	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/803,330	KAMPHAUSEN ET AL.
Office Action Summary	Examiner	Art Unit
	Joshua D. Schneider	2182
The MAILING DATE of this communication Period for Reply	n appears on the cover sheet wit	h the correspondence address
A SHORTENED STATUTORY PERIOD FOR R WHICHEVER IS LONGER, FROM THE MAILIN - Extensions of time may be available under the provisions of 37 C after SIX (6) MONTHS from the mailing date of this communication - If NO period for reply is specified above, the maximum statutory is Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	NG DATE OF THIS COMMUNIC FR 1.136(a). In no event, however, may a re- on. period will apply and will expire SIX (6) MONT statute, cause the application to become ABA	ATION. ply be timely filed HS from the mailing date of this communication. NDONED (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on This action is FINAL. 2b) Since this application is in condition for al closed in accordance with the practice un	This action is non-final. Iowance except for formal matte	
Disposition of Claims		
4) ⊠ Claim(s) 1-20 is/are pending in the application 4a) Of the above claim(s) is/are with 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-20 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction as	hdrawn from consideration.	
Application Papers		
9) The specification is objected to by the Exa 10) The drawing(s) filed on is/are: a) Applicant may not request that any objection t Replacement drawing sheet(s) including the c 11) The oath or declaration is objected to by the	accepted or b) objected to be of the drawing(s) be held in abeyand orrection is required if the drawing(s	ce. See 37 CFR 1.85(a). s) is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for fo a) All b) Some * c) None of: 1. Certified copies of the priority docu 2. Certified copies of the priority docu 3. Copies of the certified copies of the application from the International B * See the attached detailed Office action for	ments have been received. ments have been received in Ap priority documents have been rureau (PCT Rule 17.2(a)).	pplication No received in this National Stage
Attachment(s)	. 🗖 :	
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-94 Information Disclosure Statement(s) (PTO-1449 or PTO/S Paper No(s)/Mail Date 8/29/2005. 	·' — —	/Mail Date ormal Patent Application (PTO-152)

Art Unit: 2182

DETAILED ACTION

Specification

- 1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
- 2. It is also noted that the response to this case references an incorrect application number.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 4. Claims 1-10 are rejected under 35 U.S.C. 102(a) as being anticipated by JP 2004-15181 to Fujimori Shingo.
- 5. With regards to claim 1, Fujimori teaches at least one IEEE 1394 interface for processing data in IEEE 1394 format by at least one of receiving and transmitting (Fig. 1, element 104, 1394); at least one USB interface for processing data in USB format by at least one of receiving and transmitting (Fig. 1, element USB20, 101); and processing logic coupled to the at least one IEEE 1394 and USB interfaces to convert data between IEEE 1394 protocol and USB protocol (Fig. 1, element 102)(see translated abstract).
- 6. With regards to claim 2, Fujimori teaches the IEEE 1394 interface and USB interface comprise at least one protocol translation unit (Fig. 1, element 104, 1394).
- 7. With regards to claim 3, Fujimori teaches the at least one IEEE 1394 interface comprises an IEEE 1394 socket (Fig. 1, element 104, 1394, Fig. 2, connection for element 203).

Art Unit: 2182

8. With regards to claim 4, Fujimori teaches the IEEE 1394 interface comprises a PCI Link/Phy open host controller interface chip (Fig. 1, element 104, 1394).

- 9. With regards to claim 5, Fujimori teaches the at least one USB interface comprises a USB socket (Fig. 1, element USB20, 101, Fig. 2, connection for element 202).
- 10. With regards to claim 6, Fujimori teaches the at least one USB interface comprises a USB microcontroller chip with a high speed USB interface (high speed 2.0 interface, Fig. 1, element USB20, 101).
- 11. With regards to claim 7, Fujimori inherently teaches the USB microcontroller chip comprises a general programmable interface (programmable by definition to define endpoint type and timing, Fig. 1, element USB20, 101).
- 12. With regards to claim 8, Fujimori inherently teaches the processing logic comprises a processor executing instructions received from the at least one USB interface (Fig. 1, element USB20, 101).
- 13. With regards to claim 9, Fujimori teaches a converter, comprising an IEEE 1394 interface and a converter USB interface (Fig. 1, element 100); an IEEE 1394 device in communication with the at least one IEEE 1394 interface (Fig. 1, element 1394, 104); and a computer system, wherein the computer system includes at least one system USB interface in communication with the at least one converter USB interface (Fig. 2, element 201), and wherein the converter converts data units to facilitate transfer of the data units between the computer system and the IEEE 1394 device (Fig. 2, element 201-204).
- 14. With regards to claim 10, Fujimori teaches the IEEE 1394 device is a camcorder (Fig. 2, element 204).

Art Unit: 2182

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 16. Claims 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2004-15181 to Fujimori Shingo in further view of the Applicant Admitted Prior Art (AAPA).
- 17. With regards to claim 11, Fujimori fails to teach the IEEE 1394 device continuously streams data to the IEEE 1394 interface on the converter. However, the AAPA teaches a commercially available video editing software package, Pinnacle Systems Studio, Pinnacle Systems Liquid Edition, sold by Pinnacle Systems of Santa Clara, Calif., that streams data generated by a video camera over a IEEE 1394 (par. 0028). It would have been obvious to one of ordinary skill in the art to combine the use of commercially available video application with the converter of Fujimori in order to allow data editing over commonly available USB ports.
- 18. With regards to claim 12, Fujimori fails to teach an application running on the system, wherein the application is configured to receive the data units. However, the AAPA teaches a commercially available video editing software package, Pinnacle Systems Studio, Pinnacle Systems Liquid Edition, sold by Pinnacle Systems of Santa Clara, Calif., that processes data generated by a video camera (par. 0028). It would have been obvious to one of ordinary skill in the art to combine the use of commercially available video application with the converter of Fujimori in order to allow data editing over commonly available USB ports.

Application/Control Number: 10/803,330

Page 5

Art Unit: 2182

19. With regards to claim 13, Fujimori teaches generating an IEEE 1394 command to exchange data with a digital video device (Fig. 2, element 204), converting the IEEE 1394 command to a USB command in accordance with the USB protocol (Fig. 1, element USB20, 101); transmitting the USB command over a USB connection external to the computer system (Fig. 2, element 202); receiving the USB command in a converter device (Fig. 1, element USB20, 101); converting the USB command to the IEEE 1394 command (Fig. 1, element 102); and transmitting the IEEE 1394 command to the digital video device (Fig. 2, 203). Fujimori fails to teach the IEEE 1394 command being generated in the application according to IEEE 1394 protocol. However, the AAPA teaches a commercially available video editing software package, Pinnacle Systems Studio, Pinnacle Systems Liquid Edition, sold by Pinnacle Systems of Santa Clara, Calif., that processes data generated by a video camera (par. 0028). It would have been obvious to one of ordinary skill in the art to combine the use of commercially available video application with the converter of Fujimori in order to allow data editing over commonly available USB ports.

20. With regards to claim 14, Fujimori fails to teach converting the IEEE 1394 command to the USB command comprises a 1394-USB tunnel driver that receives a IEEE 1394 bus input-output request, creates data packets with OHCI-compatible PCI accesses and transmits them to a USB stack. However, the AAPA teaches that it is well known in the art to create USB drivers according to the well known Windows driver model (paragraphs 0051 and 0052). It would have been obvious to one of ordinary skill in the art to combine the use of well known USB driver building with the converter of Fujimori in order to allow data transmission over commonly available USB ports.

Art Unit: 2182

21. With regards to claim 15, Fujimori fails to teach converting the IEEE 1394 command to the USB command comprises, a USB client device driver that receives data packets from a IEEE 1394 stack, passes data packets to a system driver component, and transmits them to the converter device. However, the AAPA teaches that it is well known in the art to create USB drivers according to the well known Windows driver model (paragraphs 0051 and 0052). It would have been obvious to one of ordinary skill in the art to combine the use of well known USB driver building with the converter of Fujimori in order to allow data transmission over commonly available USB ports.

22. With regards to claim 17, Fujimori teaches generating an IEEE 1394 command (Fig. 2, element 204), the IEEE 1394 command being generated in the digital video device according to IEEE 1394 protocol (Fig. 2, element 204); transmitting the IEEE 1394 command over a IEEE 1394 to a converter device (Fig. 2, element 203); receiving the IEEE 1394 command in the converter device (Fig. 1, element 104); converting the IEEE 1394 command to a USB command in accordance with the USB protocol (Fig. 1, element USB20, 101); transmitting the USB command over a USB connection (Fig. 2, element 202); and receiving the USB command in the computer system (Fig. 2, element 201). Fujimori fails to teach exchanging data with the video application running on the computer system. However, the AAPA teaches a commercially available video editing software package, Pinnacle Systems Studio, Pinnacle Systems Liquid Edition, sold by Pinnacle Systems of Santa Clara, Calif., that processes data generated by a video camera (paragraph 0028). It would have been obvious to one of ordinary skill in the art to combine the use of commercially available video application with the converter of Fujimori in order to allow data editing over commonly available USB ports.

Application/Control Number: 10/803,330

Art Unit: 2182

23. With regards to claims 16 and 18, Fujimori fails to teach converting the IEEE 1394 command to the USB command comprises first converting the IEEE 1394 command to an intermediate protocol. However, the AAPA teaches commercially available chips for converting USB data and IEEE1394 to intermediate formats (paragraph 0050). It would have been obvious to one of ordinary skill in the art to combine the use of commercially available conversion chips with the converter of Fujimori in order to save time and money on design and production cost by using off the shelf product.

Page 7

With regards to claim 19, Fujimori teaches receiving a USB data packet in USB protocol 24. from a USB interface (Fig. 1, element USB20, 101) and transmitting the IEEE 1394 command in IEEE 1394 protocol to the digital video device over an IEEE 1394 interface (Fig. 2, element 203). Fujimori fails to teach the USB data packet comprises a header portion and a data portion; storing the USB data packet in a buffer; retrieving the header portion of the USB data packet from the buffer; analyzing the header portion of the USB data packet to determine a command parameter; storing the command parameter into an IEEE-1394 compliant OHCI register; retrieving the data portion of the USB data packet from the buffer; and assembling an IEEE 1394 command in IEEE 1394 protocol from the command parameter and the data portion of the USB data packet. However, the AAPA teaches that the USB specification teaches the requirements for retrieving and analyzing the header and that chips are commercially available for these function. The AAPA also teaches a commercially available Agere chip handles all functions of the Physical and Link Layers as well as a sub-set of the Transaction Layer and Serial Bus Management, as defined in IEEE1394-1995, and adheres to the 1394 Open Host Controller Interface Specification (paragraphs 0051, 0052, and 0062). It would have been obvious to one of Art Unit: 2182

ordinary skill in the art to combine the use of commercially available conversion chips with the converter of Fujimori in order to save time and money on design and production cost by using off the shelf product.

25. With regards to claim 20, Fujimori fails to teach receiving an IEEE 1394 response from a digital video device in IEEE protocol from an IEEE 1394 interface; analyzing the IEEE 1394 response to determine a response command parameter; adding a response header portion to the response command parameter to form a response USB data packet; and transmitting the response USB data packet in USB protocol over a USB interface. However, the AAPA teaches that the USB specification teaches the requirements for retrieving and analyzing the header and that chips are commercially available for these function (paragraphs 0046, 0051, and 0052). It would have been obvious to one of ordinary skill in the art to combine the use of commercially available conversion chips with the converter of Fujimori in order to save time and money on design and production cost by using off the shelf product.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua D. Schneider whose telephone number is (571) 272-4158. The examiner can normally be reached on M-F, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2182

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JDS

KIM HUYNH
SUPERVISORY PATENT EXAMINER

8/21/5%